

Seguin (E.C.)

A CONTRIBUTION

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TO THE

MEDICINAL TREATMENT

OF

CHRONIC TRIGEMINAL NEURALGIA

BY



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NEW YORK.

(Read before the New York Neurological Society.)

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A CONTRIBUTION TO THE MEDICINAL TREATMENT OF CHRONIC TRIGEMI- NAL NEURALGIA.

(Read before the New York Neurological Society, Dec. 2, 1878).

HAVING recently met with three cases of severe chronic cases of neuralgia of the trigeminus which have been favorably influenced by the internal administration of medicines, I have requested the privilege of presenting a report upon them to the Society.

CASE I.—*Epileptiform neuralgia of thirteen years' standing : cure.*—J. W., a farmer, aged 63 years, presented himself at my clinic for Diseases of the Nervous System on or about June 15, 1878, and gave the following history: Has suffered from neuralgia in the right side of the face for thirteen years. The first pain, slight and stinging, made its appearance near the external angular process of the frontal bone. There was a gradual increase in the frequency of the paroxysms, and in the severity of the pain until the time of examination. During three years has had almost constant pain, *i. e.*, the paroxysms have been repeated every two or three minutes. There has been much pain at night, but the greatest suffering has always been experienced in the forenoon. The seat of neuralgia has been the right malar region and the lower anterior temporal region. Paroxysms have been excited by the contact of clothing or of the finger; by talking or eating, and by pulling the hair on the lip and cheek. The pain has never been periodical.

The patient's general health has always been good; he has had two attacks of malarial fever: one when a boy, the last six years ago. When the attack began he was living in Marlboro, Ulster Co., N.Y., considered

a healthy place. Has never had syphilis; has always been temperate.

Attack witnessed at the clinic: A sharp and exceedingly severe pain appears in the region defined above, accompanied by injection of the cheek and eye, and the escape of tears. The paroxysm lasts several seconds, and returns every two or three minutes. Nitrite of amyl seems to mitigate the suffering. Examination of the affected and of adjacent parts is negative; there is no anaesthesia or true tender points, or any exciting cause of pain within the mouth. The etiology of the affection is unknown.

Treatment.—From June 17th to 21st, hypodermic injections of Squibb's chloroform were made daily through the mucous membrane of the cheek toward the malar region, from one to ten minims being used each time. In making these injections care was taken to avoid the point of exit of the infra-orbital nerve. The last injection was made near the supra-orbital nerve. These injections produced some smarting pain and secured relief for several hours each day, but did no more; the pain returning the next day as severely as before. Some bad effects were, however, produced, and these are worthy of consideration because hypodermic injections of chloroform in the face are usually considered harmless. I observed in this case some swelling at the seat of injection, paresis of the lower facial muscles of the type produced by lesions of the cerebral hemispheres; there was also marked numbness and slight anaesthesia in the skin of the cheek near the angle of the mouth, and over the eyebrow. The electro-muscular reactions remained normal, no abscess followed, and the paresis gradually passed away. I might add that similar unpleasant results ensued in another case in my practice about a year ago.

On June 26th, 27th, 28th, daily injections of Fowler's solution (diluted one-half) were made in the affected cheek through the mucous membrane without good or bad effects.

From June 21st to 26th, I tried Thompson's solution of phosphorus, in doses of one teaspoonful ($=\frac{1}{2}$ gr.) three and four times a day without marked benefit.

Still, on the whole, at the end of June, the patient was somewhat improved, having severe paroxysms only from four to ten times a day; though slight, sharp pains were still very frequent.

About the end of June he was given iodide of potassium in gradually increasing doses of a saturated solution. He began with ten drops three times a day, and by an increase of five drops per day at each dose, he attained a maximum of ninety-five drops three times a day. No evident benefit resulted from this course, which was terminated on July 12th.

On July 13th, was ordered five drops of the fluid extract of gelsemium four times a day. July 15th.—Reports himself as very much relieved; no special symptoms have been produced by the drug; is directed to take eight drops four times daily. July 16th.—Yesterday had no paroxysm except while eating; there have been frequent but bearable "ticks" of pain in the vicinity of the right external angular process of the frontal bone. Is ordered to take ten drops four times a day.

August 1st.—About this time, as the patient could no longer stay in town, and as I was unwilling to let him take gelsemium while away from observation, the solution of iodide of potassium was again given in doses of sixty drops three times a day.

August 10th.—Patient returns to town, and reports himself no better; he has taken the medicine regularly, and has kept a journal of the attacks. The number of attacks per diem, usually excited by eating, etc., have varied from four to eight. The iodide is suspended. The actual platinum cautery is gently applied over the right malar and temporal regions, and five drops of Fowler's solution are given in water three times a day, to be gradually increased. August 20th, the diary shows a decrease in the number and in the severity of the pains; only from three to five paroxysms each day; three yesterday. Has been cauterized three times.

August 22d.—About this time the neuralgia ceased altogether, the dose of Fowler's solution being ten drops three times daily.

September 22d.—Patient has had no pain since the

last note—a period of thirty-two days. Absolutely no pain has been felt, and the hyperesthesia has disappeared ; patient can eat, talk, wash, or rub his face with impunity for the first time in many years. The paresis of the lower face, produced by the injections of chloroform, has nearly passed away, and there is no more numbness. No toxic effects have been caused by the arsenic ; but, as he has taken ten drops so long, a change is made to Thompson's solution of phosphorus, one teaspoonful three times a day.

On September 24th a few slight paroxysms occurred, and the patient, of his own accord, resumed the arsenical solution in full doses, and in a day or two the pains ceased, and they have not returned.

Early in November this patient was shown at my clinic. He then asserted that he was perfectly well, and his healthy and cheerful aspect confirmed his statement. As he has not returned, I feel reasonably sure that the good result has been permanent.*

CASE II.—Epileptiform trigeminal neuralgia of ten years' standing greatly relieved by treatment.—H. S., aged 29 years, a janitor by occupation, consulted me on October 2, 1878, and gave the following history: Previous to the development of the present affection he had been subject to occasional dull headaches. Ten years ago he suddenly experienced a very severe sharp pain all through his head, "as if devils were at work there," lasting half an hour. There was no dizziness, or nausea, or faintness, or impairment of sight, or paralysis. For a period of six months he remained free from pain, and, indeed, was perfectly well ; then a "dull, stupid pain" began over the right eye, extending from the supra-orbital notch inward to the nose, and down the side of the nose to the ala. This pain was paroxysmal, and worse in the day-time. Later the pain extended to the eyeball, and was exceedingly severe ; the paroxysms recurring from ten to twelve times a day. In the course of two

* A letter from this patient's wife, received about December 10th, states that he remains well.

or three years pain made its appearance in the right temple, worse at night.

In the last few years the most pain has been on the top of the head, above the temple, and in front of the ear to the bregma. There has lately been an occasional and rare pain in the nose; not much in the temple. During the past summer and since, there has been some occipital pain on both sides, more on the right. In the last year there has also been pain in both jaws, in the upper lip near the median line; none in the tongue. In the last four years vision has been dim, and glasses have not corrected this defect. Five years ago, while taking medicine, had temporary diplopia. At various times during this long illness has had "dizzy spells" with varying frequency; seldom in the last few months. Has had no symptoms in other parts of the body; memory is impaired; the virile power quite lost. Had severe dyspepsia and vomiting three years ago, and has been costive during the whole period of the disease. The various painful regions are hyperesthetic, but not numb, and the tactile sensibility is perfectly preserved on both sides. There is no facial paralysis; the right pupil is positively small, the left normal. After dilatation by atropine, the ophthalmoscope shows nothing abnormal in the bottom of the eye. Hearing, smell, and taste are normal. The urine has been frequently examined by physicians and always found normal; it is now free from albumen. Marked anaemia is present in the skin and mucous membranes; has always been pale.

The paroxysms of pain are the most terrible which I have ever witnessed; the patient fairly writhing in his chair or falling to the floor in his agony. During the attack the right eye is very much injected and watery.

The patient states that no medicine has ever relieved him, and he has tried a great many. I at once prescribed Duquesnel's crystallized aconitum, a remedy with which I had obtained remarkable results during the year. The prescription was:

R. Aconitiæ (Duquesnel's).....	gr. $\frac{1}{8}$
Alcoholis,	
Glycerinæ, ss.	3 i.
Aq. menthæ pip. ad.	3 ij.
M.	

S.—A teaspoonful three times a day between meals.

I also gave him one teaspoonful of Wyeth's dialyzed iron every evening at bed-time.

Oct. 3d.—Has severe paroxysms every day; seven on October 3d, and nine yesterday.

Oct. 11th.—Has only slight physiological effects (numbness) in the finger-tips; from six to nine attacks each day. Now takes $\frac{1}{80}$ gr. aconitiæ three times a day.

Oct. 14th.—On the 12th had twelve severe spells; only two yesterday. He yesterday took, by mistake, 3 ij. of aconitia solution, or $\frac{1}{40}$ gr., twice, and two doses of 3 i., and this morning 3 ij. This is the equivalent of $\frac{1}{16}$ gr. of aconitia in twenty-four hours. He is very nervous, feels as if electricity were passing through his body and limbs; he "cannot contain himself." As this was a mistake, I directed him to resume the prescribed doses of 3 iss. ter die. The results of the mistake were, however, most fortunate; improvement began from this strong impression of aconitia upon the system, as shown in the tabular record of paroxysms:

Oct. 19th.—Excellent record; since October 13th has had only from one to three severe attacks; ordered to continue aconitia and to begin a saturated solution of iodide of potassium in five drop doses.

Oct. 31st.—Continues to do well, *i. e.*, has from one to two or three severe paroxysms daily, and a number of slight twinges. Feels numb and "very cold" from three doses of aconitia. Can't be warmed even by an overcoat; general condition much improved; physiognomy calm and contented. Besides aconitia, takes twenty-eight drops of solution of potash.

Nov. 30th.—Improvement maintained. Passes some days without severe attacks, and a few with no pain

at all. Has done much of his work as janitor of late. The aconitum has lately (since 23d) been taken twice a day, and he has hardly any numbness.

On Dec. 19.—Pills of arsenic $\frac{1}{15}$ gr., quinia gr. iii., and belladonna $\frac{1}{2}$ gr., were substituted for the iodide of potassium. The iron is kept up at night, 3 i. of dialyzed iron.

CASE III.—Neuralgia of Right Inferior Maxillary Nerve of eight years' duration; cure.—Observed at the College of Physicians and Surgeons. Mrs. A. D., aged fifty-seven; was first seen at Clinic for Diseases of the Nervous System in the autumn of 1874. She gave the following history: In 1870 had trouble with the teeth in the right lower jaw, "caught cold in the gums," and the present pain began. It occurred in paroxysms of sharp, severe pains in the right lower jaw, right half of tongue, and right half of lower lip. She suffered with no intermission up to the time when Dr. D. M. Stimson sent her to the college. The medicinal treatment which I then advised had no more effect on the neuralgia than others which had been tried, including extraction of the teeth.

In the succeeding summer, 1875, Mrs. D. again came to see me, representing herself as under no physician's care. I accordingly took charge of her, and excised at least one-quarter of an inch of her infra-maxillary nerve by the intra-buccal method, also known as Lizars'. This was followed by absolute cessation of all pain in lip, tongue, and jaw, and by anaesthesia of the right half of the lower lip.

In a few weeks—patient thinks three or four—some return of sensibility occurred in the anaesthetic district; and has increased, until now even delicate tests reveal no anaesthesia. No pain recurred until the early spring of 1877, a period of twenty months. In April, 1877, patient's husband died, and she sat a long time near the ice-box in which his body was preserved. Immediately had a return of neuralgic pain in the same regions, viz., tongue, gum, and lower lip of right side. The pain was again sharp and paroxysmal. She suffered greatly until late in the autumn of

1877, when spontaneous relief took place, and she had pain only at intervals during the whole winter. The only medicine which she took during this time was cod-liver oil. She had no powerful drugs. In the spring and early summer of this year she had as frequent and as severe attacks of pain as at any time; many paroxysms each day, attacks epileptiform in suddenness of appearance and in severity. She presented herself at the Clinic for Diseases of the Nervous System for the third time, in July 13, 1878, and the following notes from the clinic case-book embrace her history since that date:

July 15th.—The pain begins in the gum of the right lower jaw, then darts into the right half of tongue along its whole length, especially in its anterior portions; it also affects the right half of the lower lip. She has no pain in the upper jaw or in the distribution of first branch of trigeminus, but it should be stated that she has a good deal of pain, also neuralgic in character, in the right side of the head behind the ear, the right side of the neck, and right shoulder. From almost the commencement of her illness, more or less of this pain has existed, varying greatly at times, but not annoying so much by far as the maxillary neuralgia. The paroxysms of pain in the jaw and tongue come on every few minutes. Once in a while, the patient adds, when the pain is greatest in the above described region, a little of it shows itself in the gum of the right upper jaw. Is ordered a tonic mixture.

July 20th.—Is better, generally, than last week. Ordered extract gelsemini fld., gtt. v., t. i. d., the dose to be increased by one drop each day.

July 27th.—Pain relieved by the gelseminum, gtt. viij. of which produced queer sensations and double vision. In the last few days has taken only gtt. vi., t. i. d. Ordered gtt. v. twice a day and gtt. x. at bed time.

August 3d.—No marked benefit from above treatment, although much distress was produced by doses. Ordered $\frac{1}{40}$ grain of Duquesnel's aconitia in solution t. i. d.

August 10th.—On the 7th reported at my office,

and as the above doses had produced no effect, I directed her to take $\frac{1}{60}$ grain t. i. d. on an empty stomach. To-day (three days after beginning the larger doses) she is free from neuralgic pain, though some soreness of the parts remains. After each dose of $\frac{1}{60}$ grain had some tingling in extremities and face. Treatment to be continued.

August 31st.—Has had no paroxysm of pain since beginning the $\frac{1}{60}$ grain dose. Has only noticed an occasional soreness in the tongue, provoked especially by acids. Can eat with comfort, whereas four weeks ago attempts at mastication caused agony. States that effects of one dose of aconitum consist in tingling in the whole body, most marked in the toes and fingers, and in peculiar chilly sensations.

The pain in the neck and shoulders is not wholly relieved. Complains of much sweating at nights. To take for two or three days one ten-grain dose of sulphate of quinia at bed-time. The aconitum to be omitted, and Fowler's solution to be taken instead, in doses of gtt. iiij. after meals, gradually increased.

September 14th.—Has remained perfectly free from facial neuralgia, and has had only moderate pain inside of neck, right shoulder, and upper arm. Has taken gtt. x. of Fowler's solution without unpleasant effects; sweating arrested. Ordered to cease taking arsenic, and to use 3 i. of Thompson's solution of phosphorus (= $\frac{1}{9}$ grain of phosphorus), night and morning.

September 21st.—Had slight return of pain in right lower jaw and tongue on September 18th and 19th; arrested by a few doses of aconitum. To-day is perfectly well, except that right side of neck and arm are painful.

October 11th.—Has had no return of neuralgia since last note, and neck has not been so painful. States that she has more or less pain in the whole right side from behind the ear to arms and down lower extremity to heel at times. With exception of slight neuralgic pains on September 18th and 19th, has had no recurrence of inferior maxillary or lingual

neuralgia since August 7th, a period of sixty-five days.

It seems to me that three conclusions may legitimately be drawn from the above related cases:

1. That there is a possibility of relief in most severe cases of epileptiform trigeminal neuralgia. The usually received opinion is that, in such cases, recourse must be had to operation upon deep branches of the nerve, excision of Meckel's ganglion, etc., and to the systematic use of morphia to make life endurable. After my experience with the above cases, I am disposed to urge a sufferer from trigeminal neuralgia to make a trial of medicinal treatment.

2. The advantage of using medicines systematically. Not only should the doses of any one remedy be administered regularly and in progressively increasing doses, but several remedies may be used in succession, so as to profoundly affect the system. Of the medicines applicable for the treatment of neuralgia, the following are those which I can recommend most highly: aconitum, arsenic, iodide of potassium, gel-seminum, belladonna, quinia, morphia, galvanism, the actual cautery, Thompson's solution of phosphorus.

3. In the treatment of chronic neuralgia and of many neuroses, it is necessary to obtain the physiological effects of the drug employed, in order to do good. This principle of heroic medication is one which ensures success in seemingly desperate cases, and its execution requires the utmost watchfulness on the part of the physician, and intelligence and faithfulness on the part of the patient and his attendants. Many unpleasant consequences of such treatment may be avoided if we at first give very small doses of the remedy, and then make a very progressive increase. The good effects of giving medicines to the production of physiological effects are illustrated in the above cases; in the treatment of chorea by arsenic; of malarial affections by quinia; of spinal congestion and myelitis by belladonna; of syphilitic disease by mercury and iodide of potassium, etc., etc.

Inasmuch as the good effects noted in Cases II. and III. were obtained by the action of Duquesnel's aco-

nitia, it may not be amiss to close this short communication by quoting the conclusions of a report on aconitnia recently made to the N. Y. Therapeutical Society by its Committee on Neurotics.*

The chairman of this committee says:

"From the above cases the following conclusions may be justly drawn, I think:

1. The susceptibility of individuals to Duquesnel's aconitnia varies enormously; one individual in the series having been severely affected by $\frac{1}{200}$ grain, while another tolerated with no special symptoms $\frac{1}{84}$ grain every three hours. On the average, distinct physiological and therapeutic effects were obtained by giving $\frac{1}{100}$ grain three times a day.

2. Out of six cases of severe trigeminal neuralgia, one, probably a reflex neuralgia from a decayed tooth, was not at all benefited.

Three cases, epileptiform in character, were slightly or only temporarily relieved. Two cases were cured. One of these had existed for seven years, with an interruption of twenty months, procured by resection of the affected nerve.

It would thus appear that, while we cannot indorse Prof. Gubler's statement that Duquesnel's aconitnia never fails, we must recognize in it one of the most powerful and best agents for relieving and curing trigeminal neuralgia.

3. We do not as yet know the forms of trigeminal neuralgia which can be most influenced by aconitnia."

* *Vide N. Y. Medical Journal*, Dec., 1878, p. 621.

